GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

UNSTARRED QUESTION NO:4034
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IITM Report on Air Pollution
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Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the Indian Institute of Tropical Meteorology (IITM), Pune has published a research paper highlighting the increasing incidence of mortality due to air pollution in the country;

(b) if so, whether the significance of such a research report has been brought to the notice of the Government;
(c) if so, the details of the steps initiated to study and assess the veracity of such report;

(d) whether the said report has been termed as void and bereft of validity; and

(e) if so, the details thereof and responses of the Government on the same?

Answer

THE MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)

(a) Yes Madam.
(b-c) The said research paper contains a lot of uncertainties and false assumptions. Based on truthful analysis by fully accounting the shortcomings, unrealistic assumptions and lack of representative primary source of mortality data etc, the following shortcomings of the study are identified:

i. The study clearly states that the metric used − the value of the statistical life (VSL) to evaluate the cost of premature mortality , used widely in Europe and USA, on original India specific studies are scarce. Hence, authors have decided to use VSL estimates from developed countries after adjusting for differences in income or national per capita output as suggested in organization for Economic Cooperation and Development (OECD), 2014 and others of 2015 for estimating India specific VSL which is highly unrealistic as far as its implication of estimates goes and introduces a clear uncertainty and non-representativeness of the mortality data generated for arriving at various conclusions in the study .

ii. On the calculation of the lost life expectancy due to PM 2.5 exposure, authors of the study used the estimates of higher income countries, where very clearly the average concentrations of PM 2.5 are lower than those found in India and hence introduces additional source of uncertainty of the assessment of mortality of life expectancy drop, which is the main part of the study undertaken.

iii. Moreover, the values of PM 2.5 used in the study are generated using a regional atmospheric chemistry model and not generated using long term observations. The model also has certain known uncertainties in reproducing PM 2.5 concentrations realistically.

(d) Yes Madam.

(e) Based on the above truthful analysis of the health impact methodology used for the study, it is to be mentioned that there are a lot of uncertainties in the estimation of mortality due to air pollution even though air pollution can adversely affect the health and cause mortality.